New model information

AVR-891

AV Surround Receiver

A/V Home Theater Receiver with 3D Video Connectivity

Equipped with a host of high tech features, the AVR-891 is one of the first A/V receivers to include the latest HDMI 1.4a functionality, which provides 3D pass-through (Broadcast and Blu-ray) capability, for compatibility with advanced 3D HDTVs and 3D Blu-ray discs, and also includes Audio Return Channel. It also features the latest high resolution audio decoders, including Dolby TrueHD and DTS-HD Master Audio, and includes Dolby Pro Logic IIz decoding, which provides front channel height effects for a dramatically expanded front soundstage. The 7 channel amplifier section features discrete component technology, each rated at a powerful 135 watts. The video processor provides upconversion to high definition HDMI, and includes precision picture adjustments, such as brightness, contrast, color and tint, to name a few. Setup is a breeze thanks to Audyssey MultEQ automatic room correction.

Features

New Features

- Featuring 3D pass-through technology (supports Broadcast and Blu-ray)
- Supports HDMI 1.4a with 3D, Audio Return Channel, Deep Color, "x.v.Color", Auto Lipsync and HDMI control function
- Direct play for iPod® and iPhone® via USB
- Newly developed pre-memory remote control handset with Glo-Key buttons
- iPod and iPhone playback for Zone 2
- Remote Setup Guidance via On-Screen Display
- Dual subwoofer pre-amp outputs

One-cable HD solution

- Supports HDMI 1.4a with Audio Return Channel
- All sources are up-scaled to 1080P
- 6 x HDMI in / 1 x HDMI out with GUI (Graphical User Interface)

State-of-the-art Denon Solutions for Maximizing Content Quality

- Fully discrete, identical quality and power for all 7 channels (135 W x 7ch)
- Stable power supply for high-quality sound and picture playback
- High definition audio support, Dolby TrueHD and DTS-HD Master Audio
- Supports Dolby Pro Logic IIz processing
- High-bit I/P Converter and Scaler up to 1080p
- Compressed Audio Restorer to enhance digital music files
- Denon's high picture quality circuitry
- Video digital noise reduction, to optimize effects for both SD and HD content

Connectivity & Future-ready Expandability

- Dock connectivity for iPod and network streaming
- Power Amp Assign function, for increased system configuration versatility, allows surround back, front height, 2nd zone, or L/R bi-amp modes

Ease-of-Use

- On-Board GUI via HDMI output (up to 1080p)
- Audyssey Dynamic Volume, for real-time volume adjustment
- Audyssey MultEQ and Auto Setup
  - Tower type microphone included for more accurate measuring
  - Up to six measurement points
  - High level resolution filters for satellite speakers and also subwoofer
- 2-line fluorescent display on front panel
- Sleep timer function

Others

- Lower power consumption at stand-by 0.1 W (Standby)

Made for iPod

Works with iPhone

State-of-the-art Denon Solutions for Maximizing Content Quality

• Fully discrete, identical quality and power for all 7 channels (135 W x 7ch)

To faithfully reproduce the original surround sound, each of the AVR-891's 7 channels is equipped with the same power amp of equal power. Since these power amps also use discrete circuits configured with parts strictly selected for their contribution to high sound quality, rather than with low-cost integrated circuits (ICs), the surround sound playback is of impeccably high quality.

• Featuring 3D pass-through technology

By connecting a 3D-compliant Blue-ray disc player and 3D-compliant TV to the AVR-891, you will have a 3D home theater where you can enjoy high-definition sound and video on a level you've never experienced before.

• Supports HDMI 1.4a with 3D, Audio Return Channel, Deep Color, "x.v.Color" , Auto Lipsync and HDMI control function

When you connect the AVR-891 to a TV with a single HDMI cable, it supports Audio Return Channel (ARC)(*1) that can play back the TV audio in surround sound. Until now, if you wanted to enjoy surround sound from a TV, you needed to use an optical digital cable or coaxial digital cable to bring sound from the TV to the A/V receiver. The AVR-891's ARC feature, however, helps you keep cable connections neat and out of the way as you build your home theater.

*1: The TV must also support ARC.

• High-definition audio support

The AVR-891 has a decoder that supports Dolby TrueHD and DTS-HD Master Audio, the high resolution audio formats found on many Blu-ray titles.

• Dolby Pro Logic IIz

To let you enjoy an even richer spatial expression, the AVR-891 is equipped with a Dolby Pro Logic IIz processor. By connecting Front Height speakers and using Dolby Pro Logic IIz playback, you will be able to enjoy surround sound in the vertical as well as horizontal direction.

• High-bit I/P Converter and Scaler up to 1080p

The AVR-891 uses a high-performance video up-scaler to convert SD (standard definition) video material to HD (high definition) quality. This means that the 480i/480p (SD-quality) video signals of DVD programs and other material are converted to the high-quality 1080p signal of HD video, and output to the HDMI port. The fuzziness in the details of SD video is removed to produce a clear picture. Now you can enjoy not only your DVDs but also your VCR tapes and games with much greater clarity and detail.

• Minimum Signal Path for clear audio and video signal

The "simple and straight" design concept has been thoroughly implemented in the signal paths to contribute to immaculately clean audio and video playback. Signal paths are as short as possible to keep signal degradation in the audio and video circuitry to an absolute minimum

• Direct Mechanical Ground Construction, embodying concepts for thorough vibration resistance

Vibration-resistant construction has been reviewed to thoroughly suppress the adverse influences of vibration on sound quality. The power transformers, a source of vibration, have been securely mounted on the highly rigid bottom chassis. Direct mounting of cast-iron feet to the radiator in near proximity to each other serves to suppress mutual vibration with the power transformers and other sources of vibration.

Connectivity & Future-ready Expandability

• 6 x HDMI in / 1 x HDMI out (Repeater)

• Direct play for iPod and iPhone via USB

You can also listen to music files from your iPod by simply connecting it to the AVR-891's USB port with the USB cable that came with the iPod. To start play, just press the iPod Play button on the AVR-891 or its remote control unit. Digital signals from the iPod are transmitted as is to the AVR-891 where they pass through the compressed audio restorer and are processed by advanced audio circuitry to produce a clean, high-quality sound.

•Dock connectivity for iPod and network streaming

Network music can be enjoyed via the Denon Networked Control Dock. (Requires optional ASD-51W or ASD-51N dock.)

•Power Amp Assign function, for versatility in using the AVR-891 for different purposes

The AVR-891 supports up to 7.2 channels (FL/ FR/ C/ SL/ SR/ SBL/ SBR/ SW1/ SW2) for surround playback defined by the Blu-ray disc format. To enjoy surround playback with the AVR-891's Dolby Pro Logic IIz, you can reassign the power amp from the two surround back channels (SBL/SBR) to the two front high channels (FHL/FHR). Or by assigning the SBL/SBR power amp to Zone 2, you can enjoy multi-room audio playback, or to achieve higher-quality sound for 2-channel stereo playback, you can configure the AVR-891 for front bi-amp operation. These are just some of the ways you can arrange the AVR-891's amps to suit various listening styles.

Ease-of-use

• On-Board GUI via HDMI output (up to 1080p)

The AVR-891 is equipped with an easy-to-view Graphical User Interface (GUI) featuring visual menu displays. These menu displays can also be output to the monitor over HDMI.

- Newly developed pre-memory remote control handset with Glo-Key buttons
- Remote Setup Guidance via On-Screen Display
- Three Quick Select buttons
- Auto surround mode
- Sleep timer function
- Audio Delay function (max. 6 frames or 200 mSec)
- Muting level settings (Full/-40dB/-20dB)
- Audio level memory, capable of correcting different signal levels for each input device
- Variable subwoofer crossover switching

Main Specifications

Power amplifier section	
Rated output	*THD figures are power amp stage values.
Front L/R	105 W + 105 W (8 ohms, 20 Hz - 20 kHz, THD 0.08 %) 135 W + 135 W (6 ohms, 1 kHz, THD 0.7%)
Center	105 W (8 ohms, 20 Hz - 20 kHz, THD 0.08 %) 135 W (6 ohms, 1 kHz, THD 0.7%)
Surround L/R	105 W + 105 W (8 ohms, 20 Hz - 20 kHz, THD 0.08 %) 135 W + 135 W (6 ohms, 1 kHz, THD 0.7%)
Surround Back L/R	105 W + 105 W (8 ohms, 20 Hz - 20 kHz, THD 0.08 %) 135 W + 135 W (6 ohms, 1 kHz, THD 0.7%)

Preamplifier section	
Input sensitivity/impedance	200 mV / 47 kΩ/kohms
Frequency response	10 Hz ~ 100 kHz — +1, –3 dB (DIRECT mode)
S/N Ratio	100 dB (IHF-A weighted, DIRECT mode)

FM section	
Tuning frequency range	87.5 - 107.9 MHz
Usable sensitivity	1.0 µV (11.2 dBf)

AM section	
Tuning frequency range	520 - 1710 kHz
Usable sensitivity	18 µV

General	
Power supply	AC 120 V, 60 Hz
Power consumption	600 W (Standby 0.1 W)
Dimensions (W x H x D)	17-3/32" x 6-47/64" x 15" 434 x 171 x 381 mm
Weight	23 lbs 13 oz, 10.8 kg

Ports		
In	HDMI	x 6
	Component	x 2
	S-Video	x 2
	Composite (Video)	x 4
	Analog Audio (Tuner included)	x 8
	Digital Optical	x 2
	Digital Coaxial	x 2
Out	HDMI Monitor	x 1
	Component Monitor	x 1
	Composite Monitor	x 1
	Composite (DVR)	x 1
	Audio Preout (SW)	x 2
	Audio REC out	x 1
	Phones	x 1
	Digital Optical	x 1
Other	USB port	x 1
	Microphone Port	x 1
	Dock Control Port	x 1
	FM Tuner Antenna	x 1
	AM Tuner Antenna	x 1

*Design and specifications are subject to change without notice.
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*Audyssey MultEQ® is a registered trademark of Audyssey Laboratories.
Audyssey Dynamic EQ® is a trademark of Audyssey Laboratories.
Audyssey Dynamic Volume™ is a trademark of Audyssey Laboratories.
*"Made for iPod" means that an electronic accessory has been designed to connect specifically to iPod and has been certified by the developer to meet Apple performance standards.
*"Works with iPhone" means that an electronic accessory has been designed to connect specifically to iPhone and has been certified by the developer to meet Apple performance standards.
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